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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

JUL - 2 2009

John Murray, Station Superintendent First Light Power Resources Mount Tom Station Route 5, Smiths Ferry Holyoke, MA 01040

RE: Proposed Discharges from New Air Emission Control System at Mount Tom

Station, NPDES Permit No. MA0005339

Dear Mr. Murray:

EPA-Region 1 (EPA) received a November 17, 2008 letter from Tighe & Bond Inc., on behalf of Mount Tom Generating Company, LLC (Mt. Tom). This letter provided supplemental information to Mt. Tom's National Pollutant Discharge Elimination System (NPDES) Permit renewal application, previously submitted on June 10, 1997 for the station located at 200 Northampton Street, Holyoke, Massachusetts (Station). A June 19, 2009 e-mail from your consultant requested a meeting to discuss these issues.

EPA understands that Mt. Tom is currently subject to an Administrative Consent Order issued by the Massachusetts Department of Environmental Protection (MassDEP) which requires the company to construct and begin operation of flue gas emission controls at the Mt. Tom Station by October, 2009. Mt. Tom is currently installing a system called Turbosorp® for this purpose and has requested confirmation that the waste streams generated from this process (equipment wash water and stormwater) would not require a permit modification.

EPA acknowledges and supports the use of emission controls for boiler exhaust to reduce mercury and SO₂ emissions and improve ambient air quality. Further, in cooperation with the MassDEP, EPA looks forward to working with Mt. Tom regarding the proper prevention, treatment and/or collection and disposal of the waste streams generated from the Station's new air emission control system.

The Station's NPDES permit authorizes the Station to discharge certain pollutants into, and to withdraw cooling water from, the Connecticut River. The Station's current NPDES permit expired September 18, 1997, but since your permit renewal application was deemed timely and complete by EPA, the existing NPDES Permit has been administratively continued and the Station remains subject to its conditions until a new permit becomes effective. As an "expired permit," the existing NPDES Permit may not be the subject of a permit modification. Instead, any changes to the existing permit will have to be proposed as part of a full permit renewal process.

On January 23, 2009, EPA issued a Request for Information pursuant to Section 308 of the Clean Water Act, that required the submission of "more detailed information to assist in the development of the reissued permit and to determine if these discharges are covered by the Station's current NPDES permit in the event the permit is not reissued by October, 2009." Mt. Tom provided its Response to the Request for Information on March 27, 2009. EPA's review of the Response noted that the analysis of a sample of ash from a Turbosorp® system at another location indicates that metals are present that are not currently limited in Mt. Tom's NPDES permit. These metals include silver, arsenic, cadmium, chromium, and mercury. These metals were not identified (all were "believed to be absent") on the 1992 NPDES Permit application (Form 2C) and, therefore, were not considered in the development of the Station's current NPDES Permit. Consistent with 40 C.F.R. § 122.62, Part II of Mt. Tom's current NPDES Permit states that:

"[a]ll discharges authorized herein shall be consistent with the terms and conditions of this permit...Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 day prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation" [emphasis added]

Since the new pollutant discharges are not limited by, and were not considered in the development of, Mt. Tom's current NPDES permit, EPA has not specifically authorized the pollutant discharges expected in the wastewater from the new Turbosorp® system.

EPA is especially concerned that the proposed waste streams may contain mercury. Mercury is bioaccumulative in plants and animals. Furthermore, the Connecticut River is being actively restored with Atlantic salmon, an important species for commercial and recreational fishing. The Massachusetts Water Quality Standards at 314 CMR 4.05(e)3 states that:

"[w]here appropriate the Department shall use an additional margin of safety when establishing water quality based effluent limits to assure that pollutants do not persist in the environment or accumulate in organisms to levels that: a. are toxic to humans, wildlife or aquatic life; or b. result in unacceptable concentrations in edible portion of marketable fish or shellfish or for the recreational use of fish, shellfish, other aquatic life or wildlife for human consumption."

Mt. Tom Station currently emits mercury pollution to the air and as a result of atmospheric deposition, this mercury is deposited into the water as well. One of the purposes of the new air emissions control equipment at the Mt. Tom Station is to limit this mercury pollution of both the air and water. Accordingly, EPA does not agree with the proposed discharge of the process Turbosorp® wash water and the Ash Silo wash water to the Station's wastewater treatment systems and anticipates that this relatively small volume of wastewater can be collected and transported off-site for proper treatment and disposal at an appropriate facility. Furthermore, EPA expects that a plan for such off-site treatment and disposal should be able to be put in place by the time the new air emissions control equipment is operational and generating this new wastewater. Therefore, EPA anticipates that Mt. Tom will not be authorized to discharge process wash waters from the Turbosorp® system currently being constructed at the Station, and recommends that Mt. Tom promptly investigate this issue and inform EPA of its conclusions regarding such off-site disposal. Further, EPA has determined that best management practices (BMPs) are needed to reduce or eliminate sources of contamination for the stormwater collected from the areas impacted by the proposed emission control equipment and proposes that EPA and Mt. Tom meet to discuss the development and implementation of specific BMPs.

EPA continues to move towards issuing a renewed NPDES Permit for Mt Tom Station, which will include consideration of the new air emission control waste streams, and will include appropriate limits and/or conditions to ensure that Massachusetts Water Quality Standards are met. Assuming that a final, new NPDES permit is not issued by October, 2009, and that EPA and MassDEP deem it appropriate for Mt. Tom Station to move forward with the discharge of the proposed new stormwater streams, EPA is considering developing an Administrative Order under the Clean Water Act to address these new stormwater streams for the period prior to the effective date of your reissued NPDES permit.

EPA looks forward to working with Mt. Tom and the MassDEP and on this matter. Please contact me at 617-918-1850 to discuss the development and implementation of specific stormwater BMPs.

Sincerely,

Denny Dart, Manager

Water Technical Unit
Office of Environmental Stewardship

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United States Environmental Protection Agency - Region I

cc. Paul Hogan, MassDEP
David Howland, MassDEP
David Horowitz, Tighe & Bond

David Webster, EPA Mark Stein, EPA Sharon DeMeo, EPA